UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Applied Therapeutics, Inc.

	t name of registrant as specified in its o		
Delaware (State or other jurisdiction of incorporation or organization)	anization)	81-3405262 (I.R.S. Employer Identification No.)	
545 Fifth Avenue, Suite 1400 New York, New York (Address of Principal Executive Offices)		10017 (Zip Code)	
	2019 Equity Incentive Plan (Full title of the plan)	-	
	Shoshana Shendelman, Ph.D. President and Chief Executive Office Applied Therapeutics, Inc. 545 Fifth Avenue, Suite 1400 New York, New York 10017 (212) 220-9226 code, and telephone number, including		
Ska	Copies to: Michael J. Schwartz dden, Arps, Slate, Meagher & Flom One Manhattan West New York, New York 10001 (212) 735-3000	LLP	
Indicate by check mark whether the registrant is a large emerging growth company. See the definitions of "larg company" in Rule 12b-2 of the Exchange Act.			
Large Accelerated filer □ Non-accelerated filer ⊠		Accelerated filer Smaller reporting company	
Emerging growth company ⊠			
If an emerging growth company, indicate by check mark i	f the registrant has elected not to use	the extended transition period for complying	with any new

or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ⊠

EXPLANATORY NOTE

This Registration Statement on Form S–8 is being filed for the purpose of registering an additional 3,713,943 shares of Common Stock reserved for issuance under the 2019 Plan. These additional securities are additional securities of the same class as other securities for which a registration statement (File No. 333-231618) on Form S-8 was filed with the Securities and Exchange Commission (the "Commission") on May 20, 2019 and a registration statement (File No. 333-255018) on Form S-8 was filed with the Commission on April 2, 2021. These additional securities have become reserved for issuance as a result of the operation of the "evergreen" provision of the 2019 Plan, which provides that the total number of securities subject to the 2019 Plan will be increased on the first day of each calendar year pursuant to specified formulas.

Pursuant to General Instruction E to Form S-8, the contents of such earlier registration statement are incorporated by reference into this Registration Statement, except that the provisions contained in Part II of such earlier registration statement are modified as set forth in this Registration Statement.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Registrant hereby incorporates by reference into this Registration Statement the following documents filed by it with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"):

- the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the Commission on March 23, 2023;
- the Registrant's Current Reports on Form 8-K, filed with the Commission on January 4, 2023 and February 24, 2023; and
- the description of the Registrant's common stock contained in its <u>Registration Statement on Form 8-A, filed with the Commission on May 6, 2019</u>, and any amendment or report filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the filing of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing such documents, except as to specific sections of such documents as set forth therein.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement herein or in any subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not constitute a part of this Registration Statement, except as so modified or superseded.

Item 8. Exhibits.

The exhibits to this Registration Statement are listed below:

Exhibit Number	Exhibit Description
<u>4.1</u>	Amended and Restated Certificate of Incorporation (incorporated herein by reference to Exhibit 3.1 to the Registrant's Annual Report on Form 10-K (File No. 001-38898), filed with the Commission on March 23, 2023).
4.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation (incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38898), filed with the Commission on October 28, 2022).
<u>4.3</u>	Amended and Restated Bylaws (incorporated herein by reference to Exhibit 3.3 to the Registrant's Annual Report on Form 10-K (File No. 001-38898), filed with the Commission on March 23, 2023).
<u>4.4</u>	Specimen common stock certificate (incorporated herein by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-230838), filed with the Commission on April 24, 2019).
4.5	2019 Equity Incentive Plan (incorporated herein by reference to Exhibit 4.6 to the Registrant's Registration Statement on Form S-8 (File No. 333-231618), filed with the Commission on May 20, 2019).
<u>5.1</u>	Opinion of Skadden, Arps, Slate, Meagher & Flom LLP.
<u>23.1</u>	Consent of Ernst & Young LLP, an Independent Registered Public Accounting Firm.
23.2	Consent of Skadden, Arps, Slate, Meagher & Flom LLP (included in Exhibit 5.1).
<u>24.1</u>	Power of Attorney (included on the signature page to this Registration Statement).
<u>107</u>	Filing Fee Table.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York on March 23, 2023.

Applied Therapeutics, Inc.

By: /s/ SHOSHANA SHENDELMAN
Shoshana Shendelman, Ph.D.
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Shoshana Shendelman and Steven Ortega, and each or any one of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date		
/s/ SHOSHANA SHENDELMAN	Chief Executive Officer and Director	March 23, 2023		
Shoshana Shendelman, Ph.D.	(Principal Executive Officer)			
/s/ STEVEN ORTEGA	Chief Accounting Officer	March 23, 2023		
Steven Ortega	(Principal Accounting Officer and Interim Principal Financial Officer)			
/s/ LES FUNTLEYDER	Director	March 23, 2023		
Les Funtleyder				
/s/ STACY J. KANTER	Director	March 23, 2023		
Stacy J. Kanter				
/s/ TEENA LERNER	Director	March 23, 2023		
Teena Lerner, Ph.D.		_		
/s/ JOEL MARCUS	Director	March 23, 2023		
Joel S. Marcus				
/s/ JAY S. SKYLER	Director	March 23, 2023		
Jay S. Skyler, M.D., MACP				

[LETTERHEAD OF SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP]

March 23, 2023

Applied Therapeutics, Inc. 545 Fifth Avenue, Suite 1400 New York, New York 10017

Re: Applied Therapeutics, Inc.

Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as special United States counsel to Applied Therapeutics, Inc., a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-8 of the Company (together with the exhibits thereto, the "Registration Statement") to be filed on the date hereof with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933 (the "Securities Act"), relating to the registration of 3,713,943 shares (the "Shares") of the Company's common stock, \$0.0001 par value per share, available for future issuance under the Company's 2019 Equity Incentive Plan (the "Plan").

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

In rendering the opinion stated herein, we have examined and relied upon the following:

- (a) the Registration Statement in the form to be filed with the Commission on the date hereof;
- (b) the Plan;
- (c) an executed copy of a certificate of Shoshana Shendelman, Secretary of the Company, dated the date hereof (the "Secretary's

Certificate");

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- (d) a copy of the Company's Amended and Restated Certificate of Incorporation (the "<u>Amended and Restated Certificate of Incorporation</u>"), certified by the Secretary of State of the State of Delaware as of March 23, 2023, and certified pursuant to the Secretary's Certificate;
- (e) a copy of the Company's Amended and Restated Bylaws (the "Amended and Restated Bylaws"), as amended and in effect as of the date hereof and certified pursuant to the Secretary's Certificate; and
- (f) copies of certain resolutions of the Board of Directors of the Company, adopted on April 24, 2019 and March 21, 2023, and certified pursuant to the Secretary's Certificate.

We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company and such agreements, certificates and receipts of public officials, certificates of officers or other representatives of the Company and others, and such other documents as we have deemed necessary or appropriate as a basis for the opinion stated below, including the facts and conclusions set forth in the Secretary's Certificate.

In our examination, we have assumed the genuineness of all signatures, including electronic signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as facsimile, electronic, certified or photocopied copies, and the authenticity of the originals of such copies. In making our examination of executed documents, we have assumed that the parties thereto, other than the Company, had the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and the execution and delivery by such parties of such documents and the validity and binding effect thereof on such parties. As to any facts relevant to the opinion stated herein that we did not independently establish or verify, we have relied upon statements and representations of officers and other representatives of the Company and others and of public officials, including the facts and conclusions set forth in the Secretary's Certificate.

In rendering the opinion stated herein, we have also assumed that (i) an appropriate account statement evidencing the Shares credited to a recipient's account maintained with the Company's transfer agent has been or will be issued by the Company's transfer agent, (ii) the issuance of the Shares will be properly recorded in the books and records of the Company, (iii) each award agreement pursuant to which rights to acquire Shares or other awards are granted pursuant to the Plan will be consistent with the Plan and will be duly authorized, executed and delivered by the parties thereto, (iv) the consideration received by the Company for each of the Shares delivered pursuant to the Plan shall not be less than the per share par value of the Shares and (v) the issuance of the Shares does not violate or conflict with any agreement or instrument binding on the Company (except that we do not make this assumption with respect to the Amended and Restated Certificate of Incorporation or the Amended and Restated Bylaws.

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We do not express any opinion with respect to the laws of any jurisdiction other than the General Corporation Law of the State of Delaware (the "DGCL").

Based upon the foregoing and subject to the qualifications and assumptions stated herein, we are of the opinion that the Shares have been duly authorized by all requisite corporate action on the part of the Company under the DGCL and, when the Shares are issued to the participants in accordance with the terms and conditions of the Plan and the applicable award agreement for consideration in an amount at least equal to the par value of such Shares, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. In giving this consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the General Rules and Regulations under the Securities Act.

Very truly yours,

/s/ Skadden, Arps, Slate, Meagher & Flom LLP

MJS

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2019 Equity Incentive Plan of Applied Therapeutics, Inc. of our report dated March 23, 2023, with respect to the financial statements of Applied Therapeutics, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2022, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

New York, New York March 23, 2023

Calculation of Filing Fee Tables

Form S-8 (Form Type)

Applied Therapeutics, Inc. (Exact Name of Registrant as Specified in its Charter)

Table 1—Newly Registered and Carry Forward Securities

Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit ⁽²⁾	Maximum Aggregate Offering Price ⁽²⁾	Fee Rate	Amount of Registration Fee	
	Newly Registered Securities							
	Common Stock, par value \$0.0001 per					\$110.20 per		
Equity	share	457(a)	3,713,943	0.90	\$3,326,021.65	\$1,000,000	\$366.53	
Total Offering Amounts			\$3,326,021.65		\$366.53			
Total Fee Offsets						_		
Net Fee Due					\$366.53			

⁽¹⁾ This Registration Statement on Form S-8 covers 3,713,943 shares of Common Stock of Applied Therapeutics, Inc. (the "Registrant") subject to issuance under the Registrant's 2019 Equity Incentive Plan (the "2019 Plan"). In addition, pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers an indeterminate number of additional shares which may be offered and issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.

⁽²⁾ Pursuant to Rule 457(c) and 457(h) of the Securities Act the proposed maximum offering price per share, the proposed maximum aggregate offering price and the amount of registration fee are estimated solely for the purpose of calculating the amount of the registration fee and are based on the average of the high and low prices of shares of Common Stock of the Registrant as reported on The Nasdaq Global Market on March 20, 2023.